- a. Measuring pH: pH sensors available from Mettler Toledo Ltd., Israel
- b. Sensor for the simultaneous measurement of pH, temperature, and pressure:
- "A wireless micro-sensor for simultaneous measurement of pH, temperature, and pressure", Mahaveer K Jain, Qingyun Cai and Craig A Grimes, Smart Mater. Struct. 10 (2001) 347-353
- c. Sensors for measuring pH:

"Review on State-of-the-art in Polymer Based pH Sensors," Olga Korostynska 1, Khalil Arshak, Edric Gill and Arousian Arshak, Sensors 2007, 7, 3027-3042

## [0127] d. Measuring temperature:

https://www.omega.com/pptst/55000.html or http://www.ti.com/lit/ds/symlink/lmt88.pdf

e. Slow release of medication:

https://en.wikipedia.org/wiki/Modified-release\_dosage

f. measuring amount of collected material

https://www.cnet.com/news/smart-bluetooth-menstrual-cup-tracks-your-period/

[0128] In the embodiment shown, payload component 1010 is shown on the most proximal portion 1020 of device interior 1030, which is attached adjacent proximal ends 64 of the axially extending elements 36d. Also, payload component 1010 is shown as being cylindrical and having a length of about one third the length of device 1000. Optionally, payload component 1010 may be attached to an alternative location on device 1010, and/or may have an alternative shape and/or size, depending on its intended function, in such a manner that it does not interfere with collapsing of the device 1000 such as, for example, for insertion into a suitable applicator, or deployment of the device within the vaginal cavity. It should be noted that payload component 1010 may optionally be added to any one of the other concepts presented in this application and, optionally, according to some embodiments, the membrane may optionally be removed, if desired.

What is claimed is:

- 1. An intravaginal device (1600) comprising: arms (1602) that pivot from a proximal base (1603); struts (1604), each of which has a first end (1610) coupled to a shaft (1606) arranged to slide in a tube (1608) and a second end (1612) coupled to one of said arms (1602); and
- a string (1616) coupled to said shaft (1606) and arranged for pulling in a proximal direction, said arms (1602) having a stowed orientation in which said struts (1604) are folded inwards such that the second ends (1612) point towards a proximal end of said device (1600), and said arms (1602) having a deployed orientation in which said struts (1604) point radially outwards and tautly hold said arms (1602) in an expanded position.
- 2. The intravaginal device (1600) according to claim 1, wherein a covering (1622) surrounds said arms (1602), and in the expanded position, fluid can flow into and be held by said covering (1622).
- 3. The intravaginal device (1600) according to claim 1, wherein in the deployed orientation, said shaft (1606) is locked relative to said tube (1608).
- 4. The intravaginal device (1600) according to claim 1, wherein for each of said struts (1604) said first end (1610) is pivotally coupled to a distal end of said shaft (1606), and said second end (1612) is pivotally coupled to said arm (1602).
- 5. The intravaginal device (1600) according to claim 1, wherein each of said struts (1604) comprises a pair of members (1604A, 1604B).
- 6. The intravaginal device (1600) according to claim 5, wherein said pair of members (1604A, 1604B) are curved.
- 7. The intravaginal device (1600) according to claim 1, wherein said arms (1602) have a removable orientation in which said shaft (1606) protrudes proximally out of said tube (1608) and said second ends (1612) point towards a distal end of the device (1600).
- 8. The intravaginal device (1600) according to claim 1, further comprising a payload component (1010) coupled to a portion of said device, said payload component (1010) comprising at least one sensor for sensing a biological feature or a substance delivery element.

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